

CLAIMS

1. A device for measuring the clearance J between the tips (3) of the blades (2) of a ring of blades and the interior wall (4) of the casing (5) surrounding said ring of blades in a turbomachine, characterized in that it comprises a probe (2) which can be mounted radially on the casing (5) and at least one end of which is made of a material that can be abraded by the tips (3) of the blades (2) as they rotate, a printed circuit (12) arranged in the mid-plane of said probe (7) which contains the axis of rotation X of said ring of blades,

this printed circuit (12) comprising a number of adjacent U-shaped electrical circuits (20a to 20e) the bases (22a to 22e) of which are arranged in a probe end likely to be abraded by the blade tips (3) and lie at different depths (za to ze) from a reference level (24) defining the interior wall (4) of the casing (5),

and means (9) for recognizing the U-shaped electrical circuits which have been broken by abrasion and the electrical circuits which are intact.

2. The device as claimed in claim 1, characterized in that two adjacent electrical circuits have a common branch.

3. The device as claimed in claim 2, characterized in that the depths (za to ze) of the bases (22a to 22e) increase by a predetermined step between the shortest

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lateral electrical circuit (20a) and the longest lateral electrical circuit (20e).

4. The device as claimed in claim 3, characterized in that the outer branch (21a) of the shortest lateral electrical circuit (20a) is connected to a first electrical terminal (16a), and the other branches of the electrical circuits are connected to a common second electrical terminal (16b) via a resistor (R) of a set of resistors.

10 5. The device as claimed in claim 4, characterized in that the resistors (R) of the set all have practically the same resistance.

6. The device as claimed in either of claims 4 and 5, characterized in that said terminals (16a, 16b) are
15 connected to an electrical circuit external to the probe which comprises means (9) for measuring the equivalent impedance of the resistors of the intact circuits.